AMOUNT OF WASTE

The purpose of this element is to determine the composition and amount of solid waste generated within a community for the ten-year planning period. Figures for solid waste generation rates and EPA national averages for solid waste composition contained in the ARC's Regional Solid Waste Management Plan and the aforementioned ARC population estimates will be used for this element.

COMPOSITION

Primary data as to the composition of Fayette County's waste stream does not exist. As was mentioned, EPA national averages for solid waste composition contained in the ARC's Regional Solid Waste Management Plan will be utilized. Tables 4. and 5. illustrate these averages.

TABLE 4.
1988 U.S WASTE GENERATIONS AND DISCARDS
COMPARISON BY WEIGHT

	1988 Waste Generation	Percent of Total	1988 Waste Discards	Percent of Total
Paper and Paperboard	71.8	40.0	53.4	34.3
Glass	12.5	7.0	11.1	7.1
Ferrous	11.6	6.5	10.9	7.0
Aluminum	2.5	1.4	1.7	1.1
Other Metals	1.1	0.6	-	-
Plastics	14.4	8.0	14.3	9.2
Rubber and Leather	4.6	2.6	4.4	2.8
Textiles	3.9	2.2	3.8	2.4
Wood	6.5	3.6	6.5	4.2
Food Waste	13.2	7.3	13.2	8.5
Yard Trimmings	31.6	17.6	31.0	19.9
Miscellaneous	2.7	1.5	-	-
Other	3.2	1.7	5.6	3.5
Total MSW	179.6	100.0	155.9	100.0

Source: Regional Solid Waste Management Plan, ARC

Note: All figures in millions of tons.

TABLE 5.
1988, 2000, 2010 ESTIMATES OF U.S. WASTE GENERATION AND COMPOSITION BY WEIGHT

	1988 Waste Generation	Percent of Generation	2000 Waste Generation	Percent of Total	2010 Waste Generation	Percent of Total
Paper	72	40%	95	44%	120	48%
Glass/Metal	28	15%	30	14%	25	10%
Food/Yard Trimmings	45	25%	45	21%	53	21%
Plastics	14	8%	20	9%	25	10%
Other	21	12%	25	12%	27	11%
TOTALS	**180**	**100%**	**215**	**100%**	**250**	**100%**

Source: Regional Solid Waste Management Plan, ARC

Note: All figures in millions of tons.

SOLID WASTE GENERATION

The Regional Solid Waste Management Plan, prepared by ARC, utilizes production rates for 1990, 2000 and 2010 to determine future solid waste generation. Waste is divided into three categories, residential, commercial/industrial and construction and demolition debris.

The production rate for residential waste is based on an estimated total of 4,313 tons of waste per calendar day divided by the metro population. This is a per capita production rate of 3.559 pounds per day from 1990 to 2000. The plan indicates that this rate will rise to a per capita production rate of 3.76 pounds per day from 2000 to 2010.

Commercial production rates were calculated by dividing the estimated total of 3,039 tons of waste per calendar day divided by the projected number of employees for a production rate of 4.31 pounds per employee per day for 1990 to 2000. This rate will rise to 4.42 for the period from 2000 and 2010.

The construction and demolition debris production rate is based on the estimated total of 2,145 tons of waste per calendar day divided by the metro population. This equals a per capita production rate of 1.17 pounds per person per day from 1990 to 2010.

With these production rates and ARC population projections future solid waste generation can be calculated. Tables 6. and 7. illustrate waste generation for Fayette County in tons per calendar day and tons per year for 1999 to 2008.

TABLE 6.
AMOUNT OF SOLID WASTE PER CALENDER DAY, 1999 to 2008

	ARC Population Figures	ARC Employment Figures	Residential Tonnage	Commercial Tonnage	Construct. & Demo Tonnage	TOTAL TONNAGE
1999	92,490	29,560	165	64	82	**310**
2000	95,900	30,950	180	68	85	**334**
2001	99,360	32,280	180	71	88	**340**
2002	102,820	33,610	187	74	91	**352**
2003	106,280	34,940	193	77	94	**365**
2004	109,740	36,270	200	80	97	**377**
2005	113,200	37,600	206	83	100	**390**
2006	117,180	39,310	213	87	104	**403**
2007	121,160	41,020	220	91	107	**418**
2008	125,140	42,730	228	94	111	**433**

Source: ARC and Fayette County Planning

TABLE 7.
AMOUNT OF SOLID WASTE PER CALENDER YEAR, 1999 to 2008

	ARC Population Figures	ARC Employment Figures	Residential Tonnage	Commercial Tonnage	Construct. & Demo Tonnage	TOTAL TONNAGE
1999	92,490	29,560	60,074	23,251	29,877	**113,202**
2000	95,900	30,950	62,289	24,344	30,978	**117,611**
2001	99,360	32,280	65,807	26,039	32,096	**123,941**
2002	102,820	33,610	68,181	27,112	33,213	**128,506**
2003	106,280	34,940	70,555	28,184	34,331	**133,071**
2004	109,740	36,270	72,929	29,257	35,449	**137,635**
2005	113,200	37,600	75,304	30,330	36,566	**142,200**
2006	117,180	39,310	77,678	31,709	37,852	**147,239**
2007	121,160	41,020	80,409	33,089	39,138	**152,635**
2008	125,140	42,730	83,140	34,468	40,423	**158,031**
		TOTAL	**716,365**	**287,784**	**349,923**	**1,354,072**

Source: ARC and Fayette County Planning

SPECIAL WASTES

Biomedical waste: There are four large medical treatment facilities located in Fayette County. The Fayette Community Hospital, Emory Clinic and Fayette Medical Center are located in Fayetteville and a Fayette Medical Center facility is also located in Peachtree City. All of these facilities contract with BFI, which takes this biomedical waste to its incinerator and autoclave facility in Lake City, Georgia.

Tires: The Frank West Company is the major hauler of tires in Fayette County. It is estimated that this company handles approximately 85 percent of Fayette County's scrap tires. These tires are taken to two locations, Waste Recovery in Atlanta or Waste Tire

Management in Lawrenceville. At these locations, tires that are suitable for recapping are separated and the remainder are shred and sold as secondary fuel.

Water and Wastewater Treatment: The Fayette County Water System operates a treatment plant that is located on Crosstown Road in Peachtree City. The treatment plant produces approximately 11 cubic yards of sludge per month. This sludge is taken to a BFI facility in Lake City, Georgia. A future water treatment plant is planned for the Lake Horton Reservoir south of Woolsey in the year 2000.

Fayetteville operates a water treatment plant and two wastewater treatment plants; all are located within the City of Fayetteville. Table 8. indicates the amount of biosolids the wastewater facilities generated from 1993 to 1997.

TABLE 8.
WASTEWATER BIOSOLIDS GENERATED

Year	Tons of Bisolids
1993	189.2
1994	161.4
1995	244.4
1996	271.4
1997	297.5

Source: Fayetteville Planning Department

An increase of four percent per year is expected for wastewater biosolids. These wastewater biosolids are mixed with the sludge from the water treatment plant and are land applied as fertilizer on a farm in Fayette County. A new water treatment plant has been in operation since the end of 1997.

Peachtree City operates three sewage treatment plants (Line Creek treatment plan, Line Creek treatment plant and Rockaway treatment plant). These plants produced 599 tons of biosolids in 1996 and 555 tons in 1997. It is estimated that 536 tons will be produced in 1998. These biosolids are taken to the Pine Ridge landfill.